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TITLE : WATER-BASED PIGMENT INK FOR BALL-POINT PEN

ABSTRACT : PURPOSE: To obtain the subject pigment ink, having a specific viscosity and a specified solid content ratio and providing a clear writing line even when written on coarse black drawing paper without separating a pigment with time by blending titanium oxide with resin particles, a thickening water-soluble resin, a binder and water, etc.

CONSTITUTION: This water-based pigment ink for ball-point pens is obtained by blending titanium oxide with resin particles (e.g. polymethyl methacrylate resin particles), a thickening water-soluble resin (e.g. xanthan gum), a binder (e.g. an alkali metallic salt of a styrene-acrylic acid copolymer) and water and further mixing a water-soluble organic solvent for preventing the ink from evaporating (e.g. ethylene glycol), a lubricant for improving the feeling of writing (e.g. polyethylene glycol), a sugar alcohol (e.g. sorbitol), a preservative, a pigment, etc., therewith and carrying out the dispersing treatment in a ball mill for 24hr. The resultant pigment ink has 6000-50000cP viscosity and 15-30vol.% solid content ratio in the ink and is good in discharge of the ink even after preservation for a long period without separating the pigment with time.

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